TORQUE BACK

Hobart Model Aero Club Inc. (00549C)
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October 2020 **Editor – Sue Venn**

President's Corner

I must confess that I have less this month than last to report (I think). Things must be running too smoothly.

Well, as usual we have the winds again along with the 'Cockies' who have started to make a meal of the place. This situation will probably continue for the next month or so and then it will be clean up time for Xmas.

I attended the 'Pattern Contest' event held at 'Roaring Forties' on Saturday 18th. Not a large number of entries, mainly the RF's and three from up north way. Phoenix, Launceston and Ben Goode (CFI). Bill Deal, Colleen Tonks and I were the spectators. The rounds continued to about 1pm then we had a light lunch prepared by Colleen and assisted by Bill. A nice quiet day.

A number of HMAC members are familiar with Val and Bill Gregory. It was on Saturday that I learnt that Val's mother in NZ had passed away at the great age of 99. This was a difficult time for Val as she was unable to travel to NZ due to the Covid. We extend our condolences to her and her family.

Damian Blackwell has gone to earth, literally. He has been fronting up with an array of electric vehicles, Off Road and Custom. He is responsible for all the hairy skid marks in the driveway gravel. Most impressive and responsive models. Good to see another activity on the property.

As some of you know, Sarah the young lady who has the horses at KF had a stroke and was sent to Melbourne. She is back in Hobart at the 'Royal' in quarantine. At this time her speech is limited to yes and no so it looks as though she will be in for the long haul. A half dozen of her friends from the 'archery on horseback' club are attending to the needs of the horses. We wish her well in her recovery. I keep in touch with her friends to see how she is going.

You may have noticed a new yellow Windsock on the highway. The old one shredded due to 100km winds and UV attack. I had discussions with the manufacturers who said that our original was a heavier material and was more suited to Heliports. The new sock is of a lightweight Hi Viz material and will reflect the wind strength more in keeping with model aircraft.

The issues with the Amenities block Gents Toilet brought about by the heavy rains seems to have resolved itself with pumping efforts carried out by Phil Hubbard.

Well that is all folks.

Happy and safe flying,

Barry Gerrard

Editors Notes

What soggy weather we've had again this last month! However there were some superb days for flying hidden amongst it all.

Thanks once again to our wonderful photographer Peter and his superb shots of the amazing variety of models that come to visit Kelly Field. Many made in your own workshops by skilled modellers, many bought ready to fly, again with great skill.

Once again it is great to hear from Mike White from the Ise of Man for this issue. Having links with other skilled modellers across the globe certainly enriches our lives, and we do thank him for his interesting contributions.

Sue

As Barry mentioned, a couple of shots of one of Damian's other electric vehicles appearing at KF.

FPV Operations

To all club pilots either thinking of or involved with FPV models. (For newcomers FPV stands for 'first person view' and refers to models flown by a video link to the model so it can be flown what is effectively from the cockpit. It does not apply to models with an onboard camera system commonly found on quads for the purpose of taking pictures).

This is an the current procedures in our Operations Manual but it must be emphasised that you need to read the MAAA manual of procedures 066.

Under Frequency control

1) 2.4GHz (this corrects an omission)

6) FPV models using frequencies in the 5GHz range must liaise with other FPV operators to ensure correct frequency separation. Transmitters must not be active until this is ensured. (this is a new provision to avoid frequency clashes between models being used at the same time)

FPV operations
(there are provisions added to this section...Remember that our insurance and CASA both require these provisions among others per MOP 066 to be adhered to)

1) Normal club procedures also apply to FPV flights, including integration with other operations at Kf

2) FPV pilots are deemed to know, understand and adhere to FPV procedures as detailed in the MAAA MOP 066. CASA modifies these as required, so it is necessary to stay abreast of any changes.

3) All FPV flights require two pilots. The PIC (pilot in command) is the non FPV pilot, and be qualified and trained to fly the model. He is fully responsible for the flight and safety.

4) Subject to P5 below, the PIC must have a buddy link to the FPV transmitter and be able to take control of the flight at any time he considers it necessary. He must maintain good visual contact with the model at all times which in turn determines the maximum distance the FPV pilot can fly.

5) If the FPV model is equipped with working RTH (return to home) the requirement for the buddy box connection is waived and only one transmitter required but the responsibilities of the PIC remain unchanged.

4) FPV racing is not permitted at Kf unless prior permission has been granted and all regulations can be met. The committee or safety officer must be supplied with all relevant information before the event can be sanctioned.

5) FPV flights are not permitted on heavy (7+Kg) or turbine powered models.

I think there are only two of us, Sebastian and myself currently involved in this branch of the activity although my efforts were truncated about three years ago by health problems and so far I have not been fit enough to resume, but hope springs eternal!

In advising members about the CASA amendments in this newsletter, Sue our editor thought some pix and comments would enliven the somewhat mind numbing official text.

So included are the pix of my FPV model. The rather gloomy pix of the model hanging from the ceiling shows the video camera under the left wing and if your glasses are clean and the light good you can see the pitot head on the LE of the right wing. This was to get it away from odd prop effects that occur when mixing frame rates and motor RPM and in the event make no difference to the ability to fly the model.

The other shot illustrates the electronics bay. The antenna on the fuselage is for the video transmitter and the actual unit is on the bulkhead under this. The blue box is the flight controller with GPS and airspeed inputs along with the current sensing unit in the red shrink wrap, and IAS and altitude measurement. The flight controller is quite a piece of work, it can fly the model when required and return to home. Most of the instruments in any aircraft are imposed on the video goggles along with a camera presentation of the scene as it unfolds including altitude, airspeed, ground speed, model position relating to departure point and a great deal more including an artificial horizon to make orientation easier.

As for cost - equipping the model is not too expensive. A rough estimate if kept simple should come under $300 but the goggles range from around $200 to $700.

Cheers and safe flying

Nils Powell
Club SO and CFI

Refurbishing a 45 year old Kamco Kadet

Mike White

This is about the refurbishment of a favourite “family model” on which both sons learnt to fly RC while we were living in Bahrain and I was a Flight Engineer on SVC10 equipment.

I bought the plane from a model shop in Hounslow, West London, in the summer of 1974 ready made and flown. I took it back to Bahrain where we flew it for a few months until the authorities banned model flying.

It still has the original OS 30 2C engine, the original fuel tank and the original True Flight 10 x 6 prop plus the original plug (offset to one side on the engine) which failed recently!!! The model was an e/r/m version but after the initial flying training was done, and the boys were fairly competent, we cut a foam wing for ailerons and that is the way it has been ever since. The wing covering is that which we put on in 1975! Great Solarfilm from those days!!!!

The Kadet is well travelled as the diary below tells……..

1974. Bought London and I took it back to Bahrain.

1980. Taken back to the UK where I flew it occasionally at the old Croydon Aerodrome site when I was on a few days stop overs.

1984. My son, Darryl, took it to Florida where he was doing his pilot training at Vero Beach.

1988. It the went with him to Indiana where he had a general aviation flying job offered.

1989. He then returned to the UK to obtain his UK/EU conversion licences and, naturally, took the Kadet with him where it was again flown occasionally at the Croydon Airport site.

2010. He then moved up here to the Isle of Man, again carrying the Kadet,

It languished unflown until this year when the virus struck and he was on furlough from Cathay Pacific so had some spare time. Now was the time to get it down from the loft and get refurbishing. We flew it for the first time in over 30 years a couple of weeks ago and everything performed faultlessly, even that old OS 30 but with a new plug.

I hope that this little journal will be of interest to some of the members.

Photos taken last month at Kelly Field

Once again many thanks to Peter Ralph.

After crashing his first maiden flight Chris Venn was too nervous to fly his rebuilt model. Damian ably assisted!

Thoughts on my LWF - Cato Model L
During the Covid 19 lock down a while back, I decided to make a quick build (not as it worked out) to fill in time.
I finished the little Cato Butterfly, and it all looked very good to my eyes, but for one thing, it was extremely tail heavy, and as such was unflyable.
I decided to hang it up just for looks, however as time went by, I couldn't resist having another go, so I saved the wings and made another body, lengthening the nose by 6 cm.
All turned out well and she flies beautifully, although no longer scale, but who cares!

A little history -
Joseph L Cato 1188 - 1965 was an early pioneer in engine development, airframe development, and as a pilot. He worked for various company's throughout his very successful career.
In 1919 whilst working for LWF he designed the twin cylinder C-2 : O-27O of 60hp @1800 rpm for the Model L Butterfly sports plane.
This little engine was tested for 27 hours on the bench, and 67 hours in the Butterfly without any alterations from the original drawings.

A new very lively model owned by JJ. Just what is needed to keep the reflexes sharp so as to be able to sort out the tricky situations he has to deal with now and then while performing his instructor`s duties.

A much more relaxing form of instruction! How often do we see an instructor working with his pipe in his mouth?

Amy under instruction from one of our maintenance groundsmen, Phil Hubbard.

Ed note: Thanks to those who look after our grounds so magnificently (not forgetting Amy's contribution!)

Phil Murrell`s Piper Cub.

Bob McAllister and Mike Hawkins showing some interest.

Peter Ralph`s Durafly SkyMule Twin Sports Model EPO 1500mm span.

Another survivor from the early days. Stuart Smith`s North American Rockwell OV-10 Bronco.
Model has been improved/ developed over time.

Stuart writes:

The Bronco dates back to the middle of 2001, the motors were 6 volt bushed motors with slow fly push-on props and 8 cell NiCad's. It was a slow fly model, a far cry from todays version. This early version was before I had a modern Tx so it only had one ESC and no individual control over each motor.

The updated version has 2 brushless in runner 2200 KV motors, drawing 16 amps each at full throttle, two 25 amp ESCs and two 5.5 x 4.5 props. One rotates anti clock wise and the other clock wise. Each motor is has it own slot in the RX allowing me to balance the revs of each motor. The final balancing was carried out in the air by adjusting the revs by the motor sound with some help from JJ.

Hand launching the early model was difficult because of the left hand turn on release, caused by both motors/propellors rotating in the same direction. Launching now is straight forward, as the modern brushless motors rotate in opposite directions.

I have the wiring diagram for the modern brushless set up, so if anyone is interested, just see me.

All's well that ends well ...

Glenn Pearce's model is a Precedent BiFly 40. Precedent kits were popular in the mid 1980s and were generally mainly ply construction having foam wings sheeted with light hardwood veneer.

Glenn`s model has excellent flying qualities and is more than adequately powered by an OS 60 FSR from the same era.

Something seems to be missing...